

Please replace the abstract with the following amended abstract:

A semiconductor device includes a silicon layer on an insulating layer. The silicon layer has a first area and a second area. ~~[[The]]~~ An FD-MOSFET is formed in the first area and ~~[[the]]~~ a PD-MOSFET is formed in the second area. The semiconductor device ~~of the present invention~~ satisfies the following formulas~~[[;]]~~: the thickness of the silicon layer is 28 nm to 42 nm, the impurity concentration D_f cm⁻³ of the first area is $D_f \leq 9.29 * 10^{15} * (62.46 - t_s)$ and $D_f \leq 2.64 * 10^{15} * (128.35 - t_s)$, and the impurity concentration D_p of the second area is $D_p \leq 9.29 * 10^{15} * (62.46 - t_s)$ and $D_p \leq 2.64 * 10^{15} * (129.78 - t_s)$.